



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,737	11/26/2003	Hee Seok Roh	K-0583	3954
34610 7590 03/31/2008 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200				
EXAMINER				
PATEL, RITA RAMESH				
ART UNIT		PAPER NUMBER		
1792				
MAIL DATE		DELIVERY MODE		
03/31/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/721,737

**Applicant(s)**

ROH, HEE SEOK

**Examiner**

RITA R. PATEL

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Applicant's Arguments / Amendments***

This Office Action is responsive to the amendment filed on 12/12/07. Claims 1-21 and 23-26 are pending. Claim 26 is new. Claims 1-4, 6, 11, 14-15, 19-21, and 23-25 have been amended.

Arguments/remarks filed by applicant on 12/12/07 are directed to the newly submitted claim amendments. Thus in light of the amendments, the former 35 USC 102 and 35 USC 103 rejections have been withdrawn.

However, upon further search and consideration a new rejection is relied upon and thus claims 1-21 and 23-26 are rejected for the reasons of record.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10-21, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertsch et al. herein referred to as "Bertsch" (US Patent No. 6,357,460) and further in view of Meret (UK Patent Application: GB 2,199,734).

Bertsch teaches a dishwashing machine having upper and lower racks 28, 26 (first and second racks) therein for holding articles to be washed. A central supply

Art Unit: 1792

conduit formed by pieces 90-98-30-32 supply washing fluid to both an upper spray arm 24 (first nozzle) and lower spray arm 22 (second nozzle). Each spray arm has a plurality of spray arms 72 which stem from it (first and second nozzle sections) to spray washing fluid. Pump assembly 20 (fluid circulating device) supplies washing fluid to the spray arms. It is at once envisaged that Bertsch's teaching of a wash liquid is made-up of water, detergents, soil particles, or any combination thereof, since it is well-known in the art of dishwashers that wash liquid is formed of water/detergent to remove soil particles from articles being washed therein.

As seen in Figure 1, upper and lower spray arms 24, 22 each have four spray arms 72 attached thereto; therefore there are at least four open ends for each of the upper and lower spray arms which connect to the central piece 90-98-30-32. Those openings read on Applicant's claims for at least two open ends of the fixed central piece.

Bertsch teaches the claimed invention except fails to teach the upper spray arm to be reversible and thus spray in either an upward or downward direction as desired. However, it is known in the art of dishwashers to have remountable spray arms for the purposes of directing fluid to either the upper or lower racks as desired to achieve the most efficient cleaning. Meret teaches a dishwasher having a wash chamber 5, basket 6, 7, (second and first racks, respectively) for supporting articles to be washed, and rotary spray arms 9, 11 for spraying wash liquid at the articles. Rotary spray arm 11 is mounted in such a way that, it can be inverted and re-mounted, so that in use, jets of wash liquid may be directed downwardly instead of upwardly (Abstract). It would have

been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of reversible and remountable spray arms in Bertsch to achieve desired cleaning means as motivated by Meret. Meret encourages remounting the spray arms to direct washing fluid either upward or downward depending on whether the dishwashing machine is full or only has items in the lower rack. Providing this type of optimal cleaning in Bertsch is beneficial in saving water and detergent, lowering energy costs, providing green technology, and achieving increased cleaning of the articles being washed.

Regarding the recitation for "manual rotation of one of the first and second nozzle section...causes a corresponding rotation of the other of the first and second nozzle section" (see present claims 6 and 20), this recitation is a statement of intended use which does not patentably distinguish over Bertsch further in view of Meret since the Bertsch-Meret invention meets all the structural elements of the claims and is capable of having its spray arms rotated manually. See MPEP 2114.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertsch and Meret, further in view of Payzant (US Patent No. 5,725,002).

Bertsch and Meret teach the claimed invention, except fail to recite the use of a pair of O-rings for connecting the surfaces between the fixed central piece and the first and second nozzles. However, Payzant teaches a dishwashing machine having interchangeable top and bottom spray arms and corresponding O-rings 52, 130 attached to a spray base 46 for connection of a spray conduit 38 thereto. It would have

been obvious to one of ordinary skill in the art at the time of the invention to use rubber O-rings in the Bertsch-Meret invention as taught by Payzant to prevent leakage of water and provide resiliency in sealing connections to water supply pipes. Rubber O-rings are commonly known and used in the art of household appliances for preventing liquid from leaking, while providing a durable connection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RITA R. PATEL whose telephone number is (571)272-8701. The examiner can normally be reached on M-F: 9-6.

Art Unit: 1792

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/  
Supervisory Patent Examiner, Art  
Unit 1792

/Rita R. Patel/  
Examiner, Art Unit 1792